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P O Box 1450 Alexandria, Virgima 22313-1450 www.uspto.gov

DATE MAILED: 06/27/2008

NOTICE OF ALLOWANCE AND FEE(S) DUE

60140 7590 06/27/2008

AMEDSION THELEN DEID DROWN DAVSMAN & STEINED LL

IMMERSION -THELEN REID BROWN RAYSMAN & STEINER LLP P.O. BOX 640640 SAN 10SE - CA 95164-0640 EXAMINER

MOON, SEOKYUN

ART UNIT PAPER NUMBER

2629

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/671.465	09/29/2003	Alex S. Goldenberg	IMMR-0091B	7950

TITLE OF INVENTION: CONTROLLING HAPTIC SENSATIONS FOR VIBROTACTILE FEEDBACK INTERFACE DEVICES

 APPLN. TYPE
 SMALL ENTITY
 ISSUE FEE DUE
 PUBLICATION FEE DUE
 PREV. PAID ISSUE FEE
 TOTAL FEE(S) DUE
 DATE DUE

 nonprovisional
 NO
 \$1440
 \$300
 \$0
 \$1740
 09/29/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (571)-273-2885

INSTRUCTIONS: This appropriate. All further indicated unless correcte maintenance fee notificat	form should be used f correspondence includired below or directed oth tions.	or tran	smitting the ISSU Patent, advance or in Block 1, by (a						tould be completed where correspondence address as rate "FEE ADDRESS" for
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block I for any change of address)				F F	Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers, Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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P.O. BOX 64064 SAN JOSE, CA	-THELEN REID 40 95164-0640	BRU	WN KA I SW	IAN & STEINER S a ti	herebly cert tates Postal idressed to ansmitted to	ify that thi Service w the Mail the USPI	s Fee(: ith suf Stop FO (57	s) Transmittal is being ficient postage for firs ISSUE FEE address 1) 273-2885, on the da	nission deposited with the United t class mail in an envelope above, or being facsimile the indicated below.
									(Depositor's name)
				ļ.					(Signature)
				L					(Date)
APPLICATION NO.	FILING DATE			FIRST NAMED INVENT	OR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/671,465	09/29/2003			Alex S. Goldenberg				MMR-0091B	7950
TITLE OF INVENTION	: CONTROLLING HAP	TIC SE	ENSATIONS FOR	VIBROTACTILE FEE	DBACK IN	TERFAC	E DEV	ICES	
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MOON, SI	EOKYUN		2629	345-156000	_				
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Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached. "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer				(2) the name of a single firm (having as a member a 2-registered attorney or agent) and the names of up to 2-registered patent attorneys or agents. If no name is 3-listed, no name will be printed.					
Number is required. 3. ASSIGNEE NAME A	ND DECIDENCE DATE	TVAD	E DRINTED ON 2						
						an assigne	e is ic	entified below, the de	cument has been filed for
(A) NAME OF ASSIC	GNEE			(B) RESIDENCE: (CI	ΓY and ST/	ATE OR C	OUNT	RY)	
Please check the appropri	iate assignee category or	catego	ries (will not be pr	inted on the patent):	Individu	al 🛚 Co	rporati	on or other private gro	up entity Government
4a. The following fee(s)	are submitted:		46	Payment of Fee(s): (P		eapply an	y prev	iously paid issue fee	hown above)
			A check is enclosed		PTO-2038	is atta	ched.		
Advance Order - #				The Director is here overpayment, to De	by authoriz	ed to charg	ge the i	equired fee(s), any det (enclose a	iciency, or credit any extra copy of this form).
5. Change in Entity Stat	tus (from status indicates s SMALL ENTITY statu			☐ b. Applicant is no I					
NOTE: The Issue Fee and	d Publication Fee (if req	uired) v tes Pate	will not be accepted	from anyone other that Office.	n the applic	ant; a regis	stered a	ttorney or agent; or th	e assignee or other party in
Authorized Signature					Date				
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This collection of inform an application. Confident submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this but irginia 22313-1450. DC 13-1450.	FR 1.3 U.S.C. USPT rden, st O NOT	11. The information 122 and 37 CFR O. Time will vary nould be sent to the SEND FEES OR O.	on is required to obtain of 1.14. This collection is depending upon the in the Chief Information Off COMPLETED FORMS	or retain a be estimated to dividual cas icer, U.S. P TO THIS A	enefit by the take 12 n ic. Any contact and 'ADDRESS	ne publ ninutes mment Fraden SENI	ic which is to file (and to complete, includin s on the amount of tir hark Office, U.S. Depa O TO: Commissioner i	by the USPTO to process) g gathering, preparing, and ne you require to complete rtment of Commerce, P.O. or Patents, P.O. Box 1450,

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10/671,465	09/29/2003	Alex S. Goldenberg	IMMR-0091B	7950	
60140	7590 06/27/2008		EXAMINER		
IMMERSION -	THELEN REID BRO	MOON, SEOKYUN			
P.O. BOX 640640 SAN JOSE, CA 95164-0640			ART UNIT	PAPER NUMBER	
			2620		

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 586 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 586 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Notice of Allowability

Application No.	Applicant(s)	
10/671,465	GOLDENBERG ET AL.	
Examiner	Art Unit	
SEOKATIV MOON	2620	

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the Amendments mailed on February 19, 2008. The allowed claim(s) is/are 1,3 and 5-15.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). b) \(\subseteq \text{Some* c) \subseteq \text{None of the:} a) \square All 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

(a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6.

DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the

attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- 1. | Notice of References Cited (PTO-892)
- 2. Notice of Draftperson's Patent Drawing Review (PTO-948)
- Information Disclosure Statements (PTO/SB/08). Paper No./Mail Date 10/22/2007
- 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material

5. F	Notice of	Informal	Patent	Application

- 6. Interview Summary (PTO-413), Paper No./Mail Date
- 7. T Examiner's Amendment/Comment
- 8. X Examiner's Statement of Reasons for Allowance
- Other .

Art Unit: 2629

DETAILED ACTION

Allowable Subject Matter

Claims 1, 3, and 5-15 are allowed.

The following is an examiner's statement of reasons for allowance:

None of the prior arts of record teaches a periodic control signal configured to drive an actuator

having a rotatable mass such that the mass rotates to produce a vibration having a magnitude and a

frequency, wherein the magnitude of the vibration is independent of the frequency of the vibration and

the on-time of the periodic control signal is determined based on a selected frequency of the vibration and

the on-time of the control signal is determined using a first method when a selected frequency of the

vibration is below a predetermined threshold frequency and is determined using a second method when a

selected frequency of the vibration is above the predetermined threshold frequency.

Any comments considered necessary by applicant must be submitted no later than the payment of

the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such

submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to SEOKYUN MOON whose telephone number is (571)272-5552. The examiner can

normally be reached on Mon - Fri (8:30 a.m. - 5:00 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Sumati Lefkowitz can be reached on (571) 272-3638. The fax phone number for the organization where

this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/671,465 Page 3

Art Unit: 2629

CANADA) or 571-272-1000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR

June 9, 2008 /S. M./ Examiner, Art Unit 2629

/Sumati Lefkowitz/ Supervisory Patent Examiner, Art Unit 2629